

CLAIMS:

1. An isolated nucleic acid molecule comprising a polynucleotide selected from the group consisting of:

(a) a polynucleotide coding for a polypeptide consisting of the amino acid sequence of SEQ ID NO: 7;

(b) a degenerate polynucleotide coding for a polypeptide coding for the amino acid sequence of SEQ ID NO: 7;

(c) a polynucleotide complementary to the polynucleotide of (a) or (b); and

(d) a polynucleotide consisting of at least 15 contiguous nucleotides from the polynucleotide of (a), (b), or (c) including nucleotide 446.

2. The polynucleotide of claim 1, wherein the polynucleotide is DNA.

3. The polynucleotide of claim 1, wherein the polynucleotide is RNA.

4. The polynucleotide of claim 3, wherein the polynucleotide comprises SEQ ID NO: 5.

5. A vector comprising the DNA polynucleotide of claim 2.

6. An isolated host cell comprising the vector of claim 5.

7. A method of producing a polypeptide, comprising the steps of allowing the host cell of claim 6 to express a polypeptide encoded by the polynucleotide.

8. A method of producing cells expressing a polypeptide comprising the steps of transforming or transfecting cells with the vector of claim 5 and allowing the cells to express the polypeptide encoded by the polynucleotide of the vector.

9. An isolated polypeptide comprising the amino acid sequence of SEQ ID NO: 7.

10. A method of screening for potential agents that regulate the activity of the polypeptide of SEQ ID NO: 7 in a cell comprising the steps of:

contacting a cell with a test compound, wherein the cell expresses or overexpresses the polypeptide of SEQ ID NO: 7 or a fragment thereof including position 44;

measuring the level of activity of the polypeptide of SEQ ID NO: 7 in the cell, wherein a test compound which increases or decreases the activity of the polypeptide of SEQ ID NO: 7 or fragment thereof in the cell is a potential agent that regulates the activity of the polypeptide of SEQ ID NO: 7.

11. An isolated nucleic acid molecule comprising a polynucleotide selected from the group consisting of:

(a) a polynucleotide coding for a polypeptide consisting of the amino acid sequence of SEQ ID NO: 8;

(b) a degenerate polynucleotide coding for a polypeptide coding for the amino acid sequence of SEQ ID NO: 8;

(c) a polynucleotide complementary to the polynucleotide of (a) or (b); and

(d) a polynucleotide consisting of at least 15 contiguous nucleotides from the polynucleotide of (a), (b), or (c) including nucleotide 446.

12. The polynucleotide of claim 11, wherein the polynucleotide is DNA.

13. The polynucleotide of claim 11, wherein the polynucleotide is RNA.

14. The polynucleotide of claim 13, wherein the polynucleotide comprises SEQ ID NO: 6.

15. A vector comprising the DNA polynucleotide of claim 12.

16. An isolated host cell comprising the vector of claim 15.

17. A method of producing a polypeptide, comprising the steps of allowing the host cell of claim 16 to express a polypeptide encoded by the polynucleotide.

18. A method of producing cells expressing a polypeptide comprising the steps of transforming or transfecting cells with the vector of claim 15 and allowing the cells to express the polypeptide encoded by the polynucleotide of the vector.

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19. An isolated polypeptide comprising the amino acid sequence of SEQ ID NO:

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20. A method of screening for potential agents that regulate the activity of the polypeptide of SEQ ID NO: 8 in a cell comprising the steps of:

10 contacting a cell with a test compound, wherein the cell expresses or overexpresses the polypeptide of SEQ ID NO: 8 or a fragment thereof including position 44;

15 measuring the level of activity of the polypeptide of SEQ ID NO: 8 in the cell, wherein a test compound which increases or decreases the activity of the polypeptide of SEQ ID NO: 8 or fragment thereof in the cell is a potential agent that regulates the activity of the polypeptide of SEQ ID NO: 8.

21. An isolated nucleic acid molecule comprising a polynucleotide selected from the group consisting of:

20 (a) a polynucleotide coding for a polypeptide consisting of the amino acid sequence of SEQ ID NO: 12;

(b) a degenerate polynucleotide coding for a polypeptide coding for the amino acid sequence of SEQ ID NO: 12;

25 (c) a polynucleotide complementary to the polynucleotide of (a) or (b); and

(d) a polynucleotide consisting of at least 15 contiguous nucleotides from the polynucleotide of (a), (b), or (c) including nucleotide 320.

22. The polynucleotide of claim 21, wherein the polynucleotide is DNA.

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23. The polynucleotide of claim 21, wherein the polynucleotide is RNA.

24. The polynucleotide of claim 23, wherein the polynucleotide comprises SEQ ID NO: 11.

25. A vector comprising the DNA polynucleotide of claim 22.

26. An isolated host cell comprising the vector of claim 21.

27. A method of producing a polypeptide, comprising the steps of allowing the host cell of claim 26 to express a polypeptide encoded by the polynucleotide.

28. A method of producing cells expressing a polypeptide comprising the steps of transforming or transfecting cells with the vector of claim 25 and allowing the cells to express the polypeptide encoded by the polynucleotide of the vector.

29. An isolated polypeptide comprising the amino acid sequence of SEQ ID NO: 12.

30. A method of screening for potential agents that regulate the activity of the polypeptide of SEQ ID NO: 12 in a cell comprising the steps of:

contacting a cell with a test compound, wherein the cell expresses or overexpresses the polypeptide of SEQ ID NO: 12 or a fragment thereof including position 30;

measuring the level of activity of the polypeptide of SEQ ID NO: 12 in the cell, wherein a test compound which increases or decreases the activity of the polypeptide of SEQ ID NO: 12 or fragment thereof in the cell is a potential agent that regulates the activity of the polypeptide of SEQ ID NO: 12.